

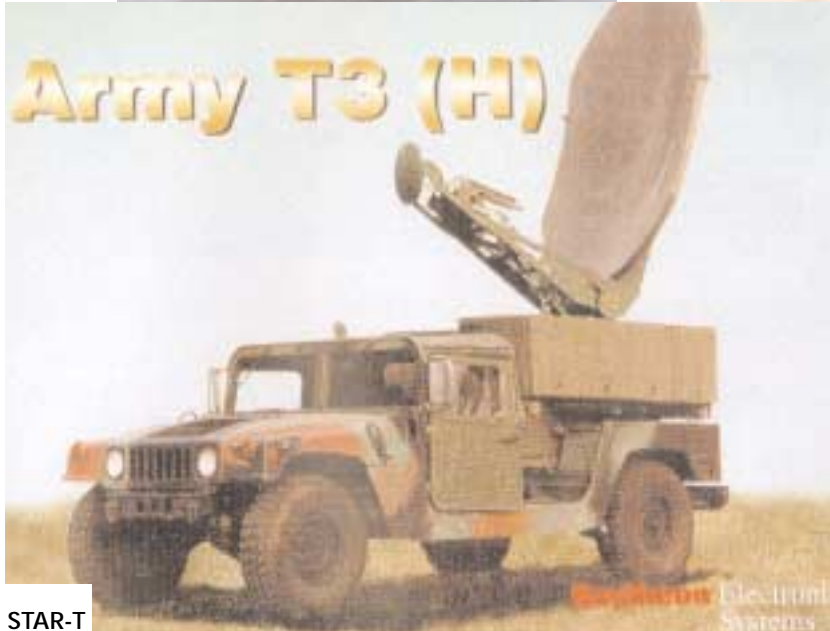
# Military Satellite Communications (MILSATCOM)-UHF/SHF/TACSAT



SPITFIRE



MILSAT



STAR-T

**GBS**  
(Global Broadcast Service)

A diagram of a parabolic satellite dish antenna mounted on a tripod stand.

Receive Terminal (RT)

A diagram showing two military vehicles: a truck and a Humvee, both equipped with satellite communication equipment.

Theater Injection Point (TIP)

GBS

## MISSION

Achieve end-to-end connectivity to satisfy Joint Chiefs of Staff command, control, communications, computers, and intelligence (C4I), supporting the National Command Authority, commanders-in-chief, military departments, and other departments and agencies of the government.

## DESCRIPTION AND SPECIFICATIONS

Military Satellite Communications (MILSATCOM) includes satellite terminals, satellite control subsystems, communications subsystems, and all related equipment. MILSATCOM projects consist of the following:

**Ultra High Frequency (UHF), Super High Frequency (SHF), and Commercial C and Ku Band Tactical Satellite (TACSAT) programs.** These programs provide the reach-back capability between the forward deployed force and the Continental United States sustaining base required to support power projection.

**TACSAT.** The AN/PSC-5 Spitfire UHF Manpack Terminal supports Army, Air Force, Marine Corps, and Special Operations Forces (SOF) use of Fleet Satellite/Air Force Satellite/UHF follow-on satellites. The Spitfire has embedded communications security and demand-assigned, multiple-access capability, and will replace the existing inventory of single-channel satellite communications radios.

For **SHF Tactical Satellite (TACSAT) Terminals**, the SHF Tri-Band Advanced Range Extension (STAR-T) terminal is mounted in a heavy High Mobility Multipurpose Wheeled Vehicle, and will selectively replace the aging fleet of AN/TSC-85B/93B TACSAT terminals at echelons corps and above. The terminal provides Tri-Band (C and Ku bands in addition to the existing DSCS, X-Band) communications capability for split-based operations; and it has an integrated switch to interface with commercial and joint military switching systems.

**GBS.** Global Broadcast Service (GBS) is an integrated communications system that provides users worldwide with a one-way, high-speed information flow of high-volume, multi-media information, including imagery, maps, weather data, logistics, air tasking orders, and other data. GBS will transmit up to 24 Mbps on each of four transponders on the Navy's UFO 8, 9, and 10 satellites. Transportable Ground Receiver Suites (TGRS) will receive information from GBS Ka-band or commercial Ku-band transponders. The Theater Injection Point (TIP) will provide commanders-in-chief/the commander of the joint task force with an in-theater uplink transmit capability.

## FOREIGN COUNTERPART

No known foreign counterpart

## FOREIGN MILITARY SALES

On July 27, 1998, the National Security Agency (NSA) granted limited approval to sell Spitfires to NATO C3A and Italy. On September 17, 1999 NSA authorized Raytheon to provide a one-time limited direct sale to the Government of Australia of up to ten Spitfires.

## PROGRAM STATUS

**Spitfire: 2QFY00** Fielded 67 Spitfires to first digitized division. Fielding ongoing.

**STAR-T:** In low-rate initial production (LRIP).

Development test and evaluation is ongoing.

**GBS:** In LRIP.

## PROJECTED ACTIVITIES

**Spitfire:** Fielding ongoing.

**STAR-T:**

**3QFY00** Conduct initial operational test and evaluation.

**4QFY00** Milestone IIIB decision.

**1QFY01** Full-scale production contract award.

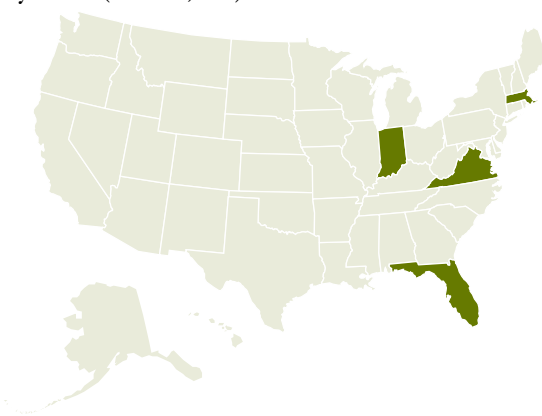
**GBS: 4QFY00** Begin fielding 27 LRIP TGRS to Ft. Hood, TX, and one TIP to the 11th Signal Brigade, Ft. Huachuca, AZ.

## PRIME CONTRACTORS

**Spitfire:** Raytheon (Fort Wayne, IN; Largo, FL)

**STAR-T:** Raytheon (Marlborough/Sudbury, MA; Largo, FL)

**GBS:** Raytheon (Reston, VA)



\* See appendix for list of subcontractors

